

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A thermoelectric apparatus comprising:
  - a Peltier effect heat transfer circuit system including:
    - a plurality of thermoelectric transducers, each of the thermoelectric transducers including a first conductive member and a second conductive member having different Seebeck coefficients, and a joining member joining the first conductive member and the second conductive member;
    - a first coupling member connecting the second longitudinal end of the first conductive member of one of the thermoelectric transducers electrically and serially to the second longitudinal end of the first conductive member of another of the thermoelectric transducers;
    - a second coupling member connecting the second longitudinal end of the second conductive member of one of the thermoelectric transducers electrically and serially to the second longitudinal end of the second conductive member of another of the thermoelectric transducers; and
    - a direct-current power supply serially connected to ~~at least~~ one of the coupling members, wherein:
      - the first conductive member has a longitudinal length long enough to prevent a thermal effect at a first longitudinal end of the first conductive member and a thermal effect at a second longitudinal end of the first conductive member from canceling each other, and to keep a difference in temperature between the first and second longitudinal ends of the first conductive member;
      - the second conductive member has a longitudinal length long enough to prevent a thermal effect at a first longitudinal end of the second conductive member and a thermal effect at a second longitudinal end of the second conductive member from canceling each other, and to keep a difference in temperature between the first and second longitudinal ends of the second conductive member;

the joining member joins the first longitudinal end of the second conductive member;

~~a coupling member connecting each of joining member opposite parts of the first conductive member and the second conductive member in each of at least one of the thermoelectric transducers electrically and serially to a respective one of joining member opposite parts of the first conductive member and the second conductive member in each of at least remaining one of the thermoelectric transducers; and~~

~~each of heat absorption modules in the Peltier effect heat transfer circuit system being disposed away from each of heat generating modules in the Peltier effect heat transfer circuit system so as to keep a temperature  $T_{\alpha}$  of the heat absorbing module and a temperature  $T_{\beta}$  of the heat generating module in a relationship of  $T_{\alpha} < T_{\beta}$~~

wherein the Peltier effect heat transfer circuit system includes a heat absorption module and a heat generating module, wherein the heat absorption module is disposed away from the heat generating module so as to keep a temperature of the heat absorbing module below a temperature of the heat generating module.

2.-15. (Canceled).